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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,998	05/21/2002	Hiroataka Takeshima	500.41391X00	6450

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EXAMINER

BARRERA, RAMON M

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,998

Applicant(s)

TAKESHIMA ET AL.

Examiner

Ramon M Barrera

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 3,4,7,15-17 and 22 is/are allowed.
6) ☒ Claim(s) 1,2,5,6,8-14,18-21 and 23-25 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 , 9, 21 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation “at least one (of the at least one) of the magnetic field adjusting means (magnetic shim) is arranged at a predetermined position of the through hole” is inconsistent with the parent claim’s “magnetic field adjusting means (magnetic shim) arranged at the uniform static magnetic field space side of the cooling vessel (respective containers)” because “the through hole” is not on the uniform static magnetic field space side of the cooling vessel (respective containers).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 8, 12, 13, 18, 19 and 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Takeshima, et al.

Takeshima, et al., in Fig. 5, discloses main coil 41, adjusting coils 43, 44, 45, cooling vessel 11, and magnetic field adjusting means (col. 8, lines 51-52).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshima in view of Kinanen.

Takeshima fails to disclose the combination of main/shield gradient coils with magnetic field adjusting means. Kinanen discloses main(52)/shield(54) gradient coils with magnetic field adjusting means(46), an equivalent structure known in the art.

Therefore, because these two combinations were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute Takeshima's combination of gradient coils with magnetic field adjusting means for Kinanen's combination of main/shield gradient coils with magnetic field adjusting means.

5. Claims 11, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshima in view of Havens or Westphal, et al.

Takeshima fails to disclose the shape of his magnetic shim(s) or their placement in layers. Havens or Westphal discloses block-shaped shims disposed in layers for the purpose of shimming an open-type magnet device. Since Takeshima, Havens or Westphal are all from the same field of endeavor, the purpose disclosed by Havens or Westphal would have been recognized in the pertinent art of Takeshima. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ blocked shaped shims disposed in layers for the purpose of shimming an open-type magnet device.

Allowable Subject Matter

6. Claims 3-4, 7, 15-17, and 22 are allowed.

Response to Arguments

7. Applicant's arguments filed 2/24/04 have been fully considered but they are not persuasive. Applicant asserts Takeshima's magnetic field adjusting means are not "at the uniform static magnetic field space side of the cooling vessel". Takeshima in col. 8, lines 51-52 discloses magnetic field shimming means in recess portions 52A and 52B of Fig. 5, which results in said shimming means being "at the uniform static magnetic field space side of the cooling vessel".

Conclusion


8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramon M Barrera whose telephone number is (703)308-0636. The examiner can normally be reached on Monday through Friday from 3 to 6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (703)308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.


Ramon M Barrera
Primary Examiner
Art Unit 2832

rmb